Storm Spotters

Technology improves our warning system from the technology of Doppler radar used in detection of severe weather to the rapid distribution of information through the Emergency Alert System (EAS). All play a critical role in severe weather, but an important element in the warning system is the storm spotter.

Storm spotters come from all walks of life, joined by their interest in weather and their interest in serving their community. Spotters are associated with SKYWARN, a volunteer program developed many years ago by the National Weather Service (NWS) to train and organize spotters in every community. Spotters may be more formally organized around local emergency management agencies or other local groups such as amateur radio clubs who work directly with the spotters in their local communities. Public service personnel from fire departments, rescue squads, and law enforcement agencies are also active in severe storm spotting activities.

The Alabama SKYWARN Foundation, Inc., working with the State of Alabama, has provided a means to recognize storm spotters in Alabama through an Alabama distinctive license plate.

The license plate similar to the design above is available through each county registration office. The first step in producing the license plate is through a commitment to purchase. As soon as 250 people commit to produce the plate and make an advance payment of the $50 fee, the plate will be produced by the State of Alabama. Those who committed to the purchase can exchange their current license plate for the storm spotter license plate.

Funds generated by the purchase of these distinctive plates will go to the Alabama SKYWARN Foundation, Inc., to underwrite additional activities to increase and improve severe weather awareness and safety across our great state.

Additional information about the license plate can be found on the Alabama SKYWARN Foundation web site at www.alabamaskywarn.org

Spotters are critical to the warning process because they provide timely information on the actual weather that's happening at the ground, which is known as ground truth. Satellite imagery and Doppler radar provide NWS meteorologists with large amounts of information about the storm and its structure, but high tech equipment does not provide the specifics about the weather actually occurring at the ground. This is where spotters become the eyes and ears for the community.

Storm spotters go through training provided by the NWS to gain an understanding of storm structure. The training includes the climatology of Alabama tornadoes, details on the structure of the most severe thunderstorms known as supercells, exposure to visual clues often present prior to and during tornado events, and information on tornado safety and reporting procedures.

Spotters typically work in small groups organized around a county, or in some cases, around a grouping of several counties. Amateur radio operators compose one of the largest groups of spotters in Alabama because of their ability to communicate using their radios even when power and conventional communication methods are knocked out. National Weather Service offices have established working relationships with the amateur radio community which includes radio equipment in NWS offices to communicate with spotters in the field. This communication network often provides rapid reports of severe weather as it occurs, as happened on December 16th, 2000, with the Tuscaloosa tornado. Also, it can provide essential communication with emergency management agencies when severe weather does happen.

Volunteer storm spotters are one of the most valuable assets in a warning system that is a complex interaction of various systems. Additional information on storm spotter activities can be found on the Internet at the NWS web sites (see page 15) and at www.alert-alabama.org.